

WHAT IS CLAIMED IS:

56A.) 1. A method of determining whether a storage unit included in an ink cartridge is normal, wherein the ink 5 cartridge is detachably attached to a printer, the method comprising the steps of:

10 (a) reading a piece of decision information that has been registered in advance in a predetermined format, from the storage unit; and

15 (b) identifying whether the read-out piece of decision information satisfies the predetermined format, so as to determine whether the storage unit is normal.

15 2. A method in accordance with claim 1, wherein the step (b) determines that the storage unit is not normal in the case where the read-out piece of decision information does not satisfy the predetermined format.

20 3. A method in accordance with any one of claim 2, the method further comprising the step of:

25 (c) providing a display representing that the storage unit is not normal, when the step (b) determines that the storage unit is not normal.

30 4. A method in accordance with any one of claim 2, the method further comprising the step of:

(d) discontinuing a printing operation of the printer, when the step (b) determines that the storage unit is not normal.

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5. A method in accordance with claim 2, wherein the step (b) uses a piece of information relating to a month of manufacture of the ink cartridge as the piece of decision information.

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6. A method in accordance with claim 5, wherein the piece of information relating to the month of manufacture of the ink cartridge is expressed by a data length of four bits, and

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the step (b) determines that the storage unit is not normal in the case where all the four bits have an identical digit, that is, either one of '0' and '1'.

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7. A method in accordance with any one of claim 6, the method further comprising the step of:
(c) providing a display representing that the storage unit is not normal, when the step (b) determines that the storage unit is not normal.

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8. A method in accordance with any one of claim 6, the method further comprising the step of:
(d) discontinuing a printing operation of the printer, when the step (b) determines that the storage unit is not normal.

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9. A method in accordance with any one of claims 3, 4, 7 and 8, the method further comprising the step of:
(e) causing the printer to perform a printing operation, when the step (b) determines that the storage unit is normal since the read-out piece of decision

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~~information satisfies the predetermined format.~~

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5 10. A printer, to which an ink cartridge having a storage unit is detachably attached, the printer comprising:

a reading unit reading a piece of decision information, wherein the piece of information has been registered in advance in a predetermined format, from the storage unit; and

10 10 a decision unit identifying whether the read-out piece of decision information satisfies the predetermined format, so as to determine whether or not the storage unit is normal.

15 11. A printer in accordance with claim 10, wherein the decision unit determines that the storage unit is not normal in the case where the read-out piece of decision information does not satisfy the predetermined format.

20 12. A printer in accordance with claim 11, the printer further comprising:

a display unit that provides a display representing that the storage unit is not normal, when the decision unit determines that the storage unit is not normal.

25 13. A printer in accordance with claim 11, the printer further comprising:

a printing operation stop unit that discontinues a printing operation of the printer, when the decision unit determines that the storage unit is not normal.

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14. A printer in accordance with claim 10, wherein
the decision unit determines that the storage unit is normal
in the case where the read-out piece of decision information
5 satisfies the predetermined format.

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10 15. A printer in accordance with either one of claims
11 and 14, wherein the piece of decision information is
a piece of information relating to a month of manufacture
of the ink cartridge.

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15 16. A printer in accordance with claim 15, wherein
the piece of information relating to the month of
manufacture of the ink cartridge is expressed by a data
length of four bits, and

the decision unit determines that the storage unit
is not normal in the case where all the four bits have an
identical digit, that is, either one of '0' and '1'.

20 17. A printer in accordance with claim 16, the printer
further comprising:

a display unit that provides a display representing
that the storage unit is not normal, when the decision unit
determines that the storage unit is not normal.

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18. A printer in accordance with claim 16, the printer
further comprising:

a printing operation stop unit that discontinues a
printing operation of the printer, when the decision unit
30 determines that the storage unit is not normal.

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19. A storage unit included in an ink cartridge, wherein the ink cartridge is detachably attached to a printer, the storage unit comprising:

- 5 an address counter that outputs a count in response to a clock signal output from the printer; and
- 10 a storage element that stores plural pieces of specific information including a piece of decision information registered in a predetermined format and that is sequentially accessed based on the count output from the address counter.

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20. An ink cartridge comprising a storage unit in accordance with claim 19.

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21. A computer readable recording medium, on which a specific computer program is recorded, the specific computer program being used to determine whether a storage unit is normal, wherein the storage unit is included in an ink cartridge that is detachably attached to a printer, the specific computer program comprising:

20 a program code that causes a computer to read a piece of decision information, wherein the piece of decision information has been registered in advance in a predetermined format, from the storage unit;

25 a program code that causes the computer to identify whether the read-out piece of decision information satisfies the predetermined format; and

30 a program code that causes the computer to determine that the storage unit is not normal in the case where the

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read-out piece of decision information does not satisfy
the predetermined format.

22. A method of determining whether a readable and
5 writable storage unit is normal, wherein the readable and
writable storage unit is included in an ink cartridge that
is detachably attached to a printer, the method comprising
the steps of:

reading a piece of decision information from the
10 storage unit; and

determining whether the storage unit is normal, based
on the read-out piece of decision information.

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